

# Taka Sawazaki

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## Education/career

- March 2017      **B. Sc.** in School of Materials and Chemical Technology  
Tokyo Institute of Technology (Assoc. Prof. Kuwata Shigeki)
- March 2019      **M. Sc.** in Department of Pharmaceutical Sciences  
The University of Tokyo (Prof. Kanai Motomu)
- March 2022      **Ph. D. Course** in Department of Pharmaceutical Sciences  
The University of Tokyo (Prof. Kanai Motomu)
- April 2021      **Assistant Professor**, The School of Pharmaceutical Sciences  
Wakayama Medical University (Prof. Sohma Youhei)

## Fellowship & Grant

- 2020-2021      Research Fellow of the Japan Society for the Promotion of Sciences (DC2)  
[fellowship]
- 2021-2023      JSPS Grant-in-Aids for Research Activity Start-up [research grant]
- 2023-2025      JSPS Grant-in-Aid for Young Scientists [research grant]

## Award

- June 2019      Poster Presentation Award (The 14th Annual Meeting of Japanese Society for Chemical Biology, Nagoya)
- October 2019      Poster Presentation Award (The 56th Japanese Peptide Symposium, Tokyo)

## Publication List

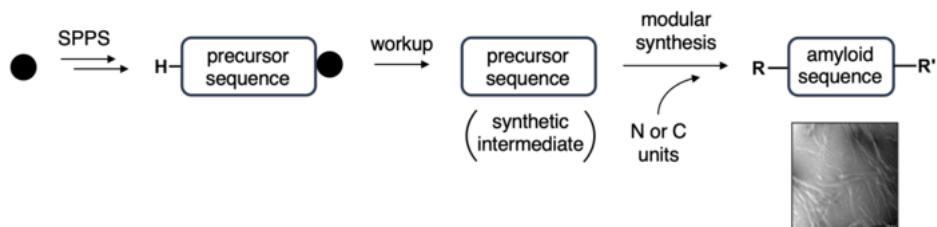
11) **Taka Sawazaki\***, Daisuke Sasaki, Youhei Sohma\*

"Catalysis driven by an amyloid-substrate complex" *Proc. Natl. Acad. Sci. U.S.A.*, **2024**, *121*, e2314704121.



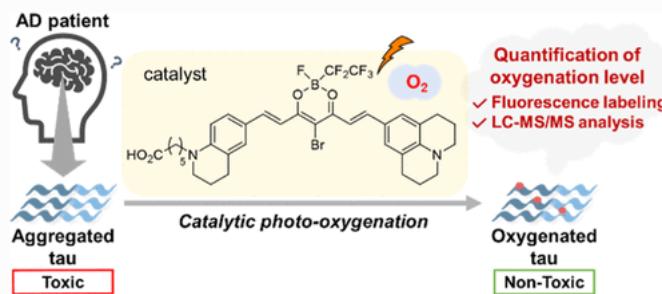
10) **Taka Sawazaki\***, Youhei Sohma\*

"Modular synthetic strategy for N/C-terminal protected amyloidogenic peptides manuscript in preparation" *J. Peptide Sci. (Special issue: PeptideTalents)*, **2024**, *30*, e3546.



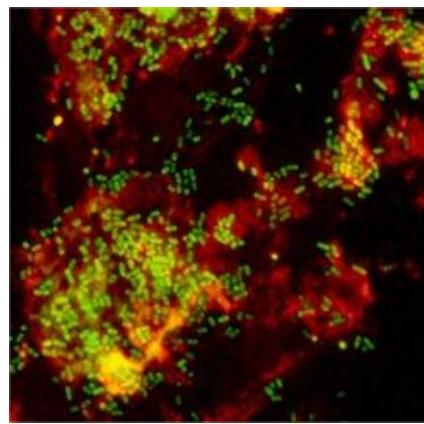
9) Hiroki Umeda, **Taka Sawazaki**, Masahiro Furuta, Takanobu Suzuki, Shigehiro A. Kawashima, Harunobu Mitsunuma, Yukiko Hori, Taisuke Tomita, Youhei Sohma, Motomu Kanai\*

"Quantitative assays for catalytic photo-oxygenation of Alzheimer disease-related tau proteins" *ACS Chemical Neuroscience*, **2023**, *14*, 2710-2716.



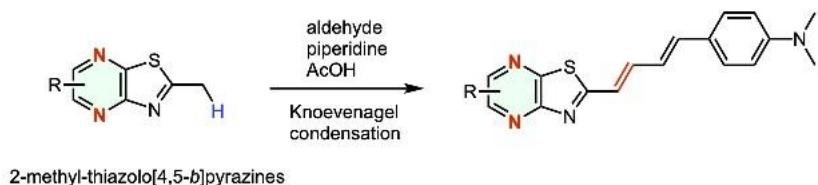
8) Joaquim Torra, **Taka Sawazaki**, Patricia Bondia, Santi Nonell, Motomu Kanai\*, Youhei Sohma\*, Cristina Flors\*

"Activatable Iodinated BODIPYs for Selective Imaging and Photodynamic Disruption of Amyloid Structures in Pathogenic Bacterial Biofilms" *Sens. Actuators B Chem.*, **2022**, 132475.



7) **Taka Sawazaki**, Youhei Sohma\*, Motomu Kanai\*

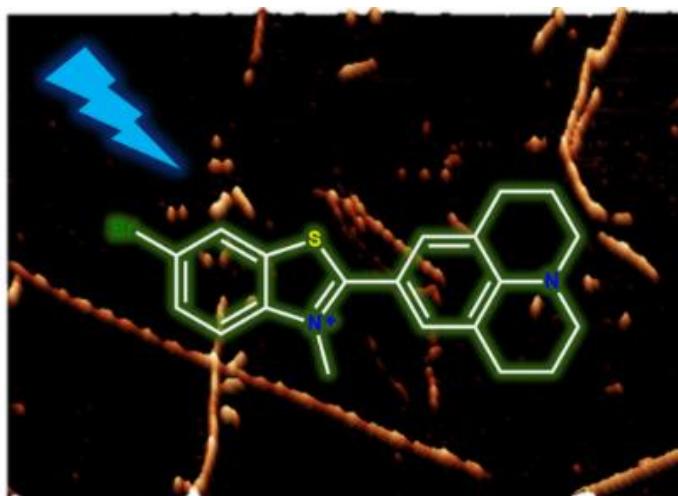
"Knoevenagel condensation between 2-methyl-thiazolo[4,5-b]pyrazines and aldehydes." *Chem. Pharm. Bull.*, **2022**, 70, 82–84.



6) Patricia Bondia, Joaquim Torra, Caterina M. Tone, **Taka Sawazaki**, Adrián del Valle, Begoña Sot, Santi Nonell, Motomu Kanai\*, Youhei Sohma\*, Cristina Flors\*

"A nanoscale view of amyloid photodynamic damage"

*J. Am. Chem. Soc.* **2020**, 142, 922-930

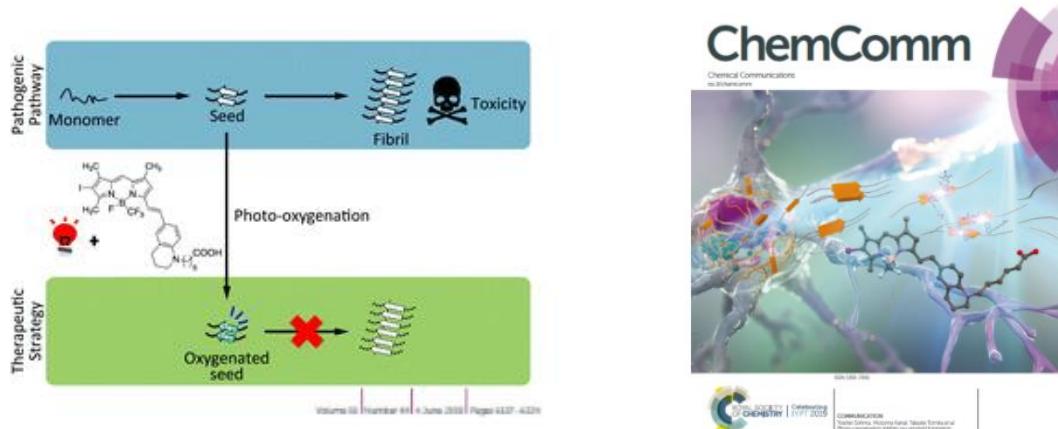


5). Takanobu Suzuki#, Yukiko Hori#, **Taka Sawazaki**#, Yusuke Shimizu, Yu Nemoto, Atsuhiko Taniguchi, Shuta Ozawa, Youhei Sohma\*, Motomu Kanai\*, Taisuke Tomita\* (#contributed equally)

"Photo-oxygenation inhibits tau amyloid formation"

*Chem. Commun.*, **2019**, *55*, 6165-6168.

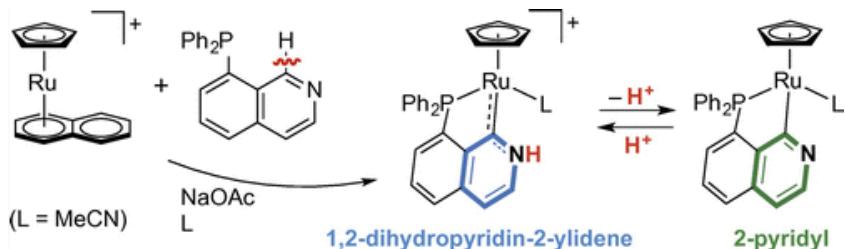
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4) Naoto Tashima, **Taka Sawazaki**, Yoshihito Kayaki\*, Shigeki Kuwata\*

"A P–C Chelate, Protic 1,2-Dihydropyridin-2-ylidene Ruthenium Complex Synthesis, Structure, and Reversible Deprotonation"

*Chem. Lett.*, **2019**, *48*, 787-790.



3) Atsuhiko Taniguchi, **Taka Sawazaki**, Yusuke Shimizu, Youhei Sohma\*, Motomu Kanai\*, "Photophysical properties and application in live cell imaging of B,B-fluoro-perfluoroalkyl BODIPYs"

*MedChemCommun*, **2019**, *10*, 1121-1125.

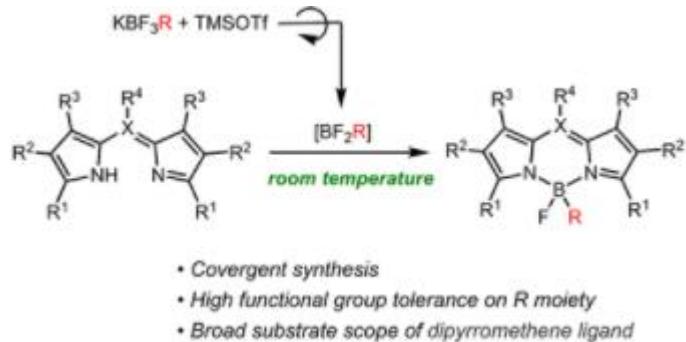


- 1:** R = F  
**2:** R = CF<sub>3</sub>  
**3:** R = C<sub>2</sub>F<sub>5</sub>

2) Taka Sawazaki, Yusuke Shimizu, Kounosuke Oisaki, Youhei Sohma\*, Motomu Kanai\*,

"Convergent and Functional-Group-Tolerant Synthesis of B-Organo BODIPYs"

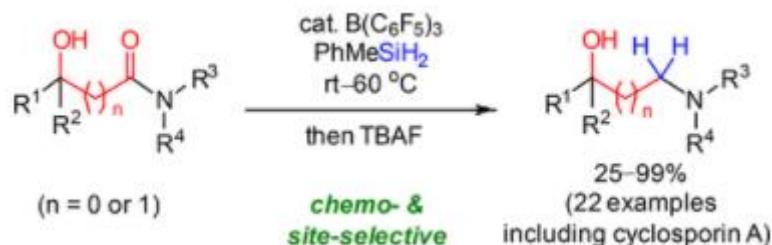
*Org. Lett.*, **2018**, *20*, 7767-7770.



1) Jizhi Ni<sup>#</sup>, Tsubasa Oguro<sup>#</sup>, Taka Sawazaki, Youhei Sohma\*, Motomu Kanai\* (#contributed equally)

"Hydroxy Group Directed Catalytic Hydrosilylation of Amides"

*Org. Lett.*, **2018**, *20*, 7371-7374.



### Presentation in International Conference

3) ○Taka Sawazaki, Fuma Murai, Kai Yamamoto, Daisuke Sasaki, Youhei Sohma,

"Selective chemical transformation via amyloid-substrate complex"

12<sup>th</sup> Singapore International Chemistry Conference, Singapore, September

2) ○Taka Sawazaki, Daisuke Sasaki, Youhei Sohma,

"Catalysis driven by Amyloid-Substrate Complex (CASL)"

Future Drug Discovery Empowered by Chemical Biology, Nara, February

1) ○Taka Sawazaki, Takanobu Suzuki, Yusuke Shimizu, Yu Nemoto, Atsuhiko Taniguchi, Shuta Ozawa, Yukiko Hori, Taisuke Tomita, Youhei Sohma, Motomu Kanai,

"Development of BODIPY-based photo-oxygenation catalyst that inhibits tau amyloid formation"

27th International Society of Heterocyclic Chemistry Congress, Kyoto, September